AMENDMENTS TO THE CLAIMS

Claims 1-11 (Canceled).

12. (Previously Presented) A process for producing polymer foams which are based on reactive polycondensation resins and have a number average pore diameter of not more than 1 μm by gel formation comprising:

1) preparing a gelable mixture of the reactive polycondensation resin in a solvent or dispersion medium,
2) preparing an aqueous dispersion comprising polymer particles,
3) mixing the mixture of the reactive polycondensation resin from step 1) with the dispersion comprising polymer particles from step 2) to give a water-containing gel, and
4) drying the water-containing gel to give the polymer foam,

with drying in step 4) being carried out at a pressure and a temperature which are below the critical pressure and below the critical temperature of the liquid phase of the gel and

the gel not being brought into contact with an organic liquid to replace the water present in the gel by this liquid after step 3) and before step 4).

13. (Previously Presented) The process according to claim 12, wherein the polymer particles have a mean diameter of from 20 to 500 nm.

14. (Previously Presented) The process according to claim 12, wherein the reactive polycondensation resin is an amino resin.

15. (Previously Presented) The process according to claim 14, wherein the amino resin is a melamine-formaldehyde resin.

16. (Previously Presented) The process according to claim 12, wherein the polymer particles comprise polymers based on monomers selected from among styrene, butadiene, alkyl acrylates and alkyl methacrylates.

17. (Previously Presented) The process according to claim 12, wherein the dispersion from step 2) comprises an ionic or nonionic surfactant.

18. (Previously Presented) The process according to claim 12, wherein the gel obtained in step 3) is subjected to aging before step 4).

19. (Previously Presented) The process according to claim 12, wherein the reactive polycondensation resin and the polymer particles are mixed with one another in a mixing ratio of from 10:1 to 1:10, disregarding water and other solvents or dispersion media, in step 3).

20. (Previously Presented) The process according to claim 12, wherein drying in step 4) is carried out at a pressure of from 0.5 to 2 bar and a temperature of from 0 to 100°C.

21. (Previously Presented) The process according to claim 12, wherein the polymer foam has a porosity of at least 70% by volume.

22. (Previously Presented) A polymer foam obtainable by the process according to claim 12.

23. (New) The process according to claim 19, wherein the reactive polycondensation resin and the polymer particles are mixed with one another in a mixing ratio of from 5:1 to 1:5.